

a latch handle hingedly coupled to said bracket, said latch handle selectively positionable about a first longitudinal axis; and

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a latch actuator hingedly coupled to said bracket and rotatable about a second longitudinal axis, said latch actuator in contact with said latch handle, a position of said latch actuator determined by a position of said latch handle, said latch handle positionable to disengage said keeper from said door retainer projection with said latch actuator.

Remarks

The Office Action mailed June 18, 2002 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-19 are now pending in this application. Claims 1-19 stand rejected.

The specification has been amended to correct typographical errors therein.

The objection to the drawings is respectfully traversed.

With respect to the objection that the drawings do not show rotational movement of the handle and the actuator, it is respectfully submitted that additional views are not required for a sufficient and/or proper understanding of the invention. It is believed that the rotational movement of the elements of the door latch assembly, including the actuator, are evident from Figure 6 and the accompanying description in paragraphs 35 to 41 of the assembly in the open, closed, and intermediate positions. It is therefore submitted that these features are fully enabled by the specification and drawings as filed, and that generation of additional views to illustrate readily understood features would place an unnecessary burden and expense on the Applicants to procure the patent protection that is believed to be entitled.

Element 23 in Figure 1 finds support in the specification via the amendment to paragraph 18.

Submitted herewith is a Request for Approval of Drawing Change including a substitute drawing sheet for Figure 5 to correct the inadvertent element 1861 in Figure 5 as filed. Paragraph 32 has also been amended for consistency with the proposed drawing sheet for Figure 5.

The Request for Approval of Drawing Change further includes a substitute drawing sheet for Figure 7 correcting the misnumbered element 220 to 240 as described in the specification.

Applicants respectfully request approval of the indicated drawing changes. Upon approval of the drawing change, Applicants will submit substitute drawings incorporating the above-noted changes.

For the reasons set forth above, Applicants request that the objections to the drawings be withdrawn.

The objection to the abstract is respectfully traversed. The abstract has been amended to delete the word "said" as suggested in the Office Action. Accordingly, Applicants respectfully request that the objection to the abstract be withdrawn.

The objection to the specification is respectfully traversed. Paragraphs 18 and 32 have been amended to correct the noted informalities in the Office Action. Accordingly, Applicants request that the objection to the specification be withdrawn.

The objection to Claims 16-18 due to an informality is respectfully traversed. Claim 16 has been amended in accordance with the suggestion in the Office Action. Claims 17 and 18 are believed to overcome the objection by virtue of the amendments to Claim 16. Applicants therefore request that the objection to Claims 16-18 be withdrawn.

The rejection of Claims 1-5 under 35 U.S.C. § 112 is respectfully traversed. Claims 1-5 have been amended to overcome the issues noted in the Office Action. Applicants therefore respectfully request that the Section 112 rejections of Claims 1-5 be withdrawn.

The rejection of Claims 1-6, 9, 10 and 16-18 under 35 U.S.C. § 102(b) as being anticipated by Rop (U.S. Patent No. 2,948,560) is respectfully traversed.

Rop describes a latch mechanism for a household refrigerator. A keeper (11) is rigidly secured to a refrigerator cabinet for engagement and disengagement of a pivotally mounted latch bolt (14). The latch bolt (14) includes a keeper engaging roller (16), a base portion (17), and a resiliently flexible portion (18) extending therebetween. The latch bolt base portion (17) includes a slot (19) that receives a pin (24) of a handle (20). The handle (20) rotates about a pivot pin (21), and as handle (20) is rotated, movement of pin (24) in slot (19) of the latch bolt base portion (17) causes the flexible portion (18) of the latch bolt to rotate and engage or disengage keeper engaging roller (16) from the rigid keeper (11) mounted to the refrigerator cabinet. Rop col. 3, lines 19 to col. 4, line 35.

Claim 1 recites a latch assembly for a door including a door retainer projection, said latch assembly comprising “a handle pivotally mounted to the door for rotation about a first end,” “a latch actuator contacting said handle and mounted to the door for rotation about a second end, said handle rotating in one direction when actuated and said latch actuator rotating in a second direction opposite the first direction” and “a resilient keeper engaged to the door retainer projection in a closed position, said latch actuator configured to disengage said keeper from the door retainer projection when said handle is actuated.”

Rop neither describes nor suggests the latch assembly recited in Claim 1. More specifically, Rop neither describes nor suggests a door including a door a retainer projection for closure of the door. Rather, the latch mechanism bolt (14) described by Rop is engaged to a keeper (11) mounted to a refrigerator cabinet to secure the door in a closed position. Apart from the latch mechanism described by Rop, the door is apparently incapable of retaining the door to the keeper.

Moreover, the rigid keeper (11) mounted to a cabinet and interacting with a flexible flange bolt (14) of a latch mechanism as described by ROP is submitted to be neither structurally

nor functionally equivalent to the latch assembly described and claimed in the instant application that includes a flexible door keeper and a latch retaining projection in the door. It is submitted that these are clearly different types of latches.

For the reasons set forth above, Claim 1 is submitted to be patentable over Rop.

Claims 2-5 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-5 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-5 likewise are patentable over Rop.

Claim 6 recites a door latch assembly for an appliance, the latch assembly comprising "a door comprising a door retainer projection," "a latch handle pivotally mounted to said door," and "a latch actuator pivotally mounted to said door, said latch handle pivoting in one direction, said latch actuator pivoting in another direction, said handle selectively positionable between an open position and a closed position to couple said door to the appliance via said door retainer projection."

As noted above, Rop neither describes nor suggests a door including a door a retainer projection for closure of the door. Rather, the latch mechanism bolt (14) is engaged to a keeper (11) mounted to a refrigerator cabinet to secure the door in a closed position. Apart from the latch mechanism described by Rop, the door is apparently incapable of retaining the door to the keeper.

For the reasons set forth above, Claim 6 is submitted to be patentable over Rop.

Claims 9 and 10 depend, directly or indirectly, from independent Claim 6. When the recitations of Claims 9 and 10 are considered in combination with the recitations of Claim 6, Applicants submit that dependent Claims 9 and 10 likewise are patentable over Rop.

Claim 16 recites a door assembly for a dishwasher, said door assembly comprising "an escutcheon," "a latch handle pivotally mounted to said escutcheon about a first rotational axis,"

and "a latch actuator pivotally mounted to said escutcheon about a second rotational axis; said latch handle contacting said latch actuator when rotated about said first longitudinal axis in a first direction and causing said latch actuator to rotate about said second longitudinal axis in a second direction opposite said first direction."

Rop describes a latch mechanism mounted to a refrigerator door and a keeper mounted to a refrigerator cabinet. Nowhere does Rop describe an escutcheon to which the latch mechanism is attached.

Claim 16 is therefore submitted to be patentable over Rop.

Claims 17 and 18 depend, directly or indirectly, from independent Claim 16. When the recitations of Claims 17 and 18 are considered in combination with the recitations of Claim 16, Applicants submit that dependent Claims 17 and 18 likewise are patentable over Rop.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-6, 9, 10 and 16-18 be withdrawn.

The rejection of Claims 7, 8, 11-15 and 19 under 35 U.S.C. § 103 as being unpatentable over Rop in view of Scott (U.S. Patent No. 4,186,287) is respectfully traversed.

Rop is described above.

Scott describes an interlock switch for ensuring that an appliance is operable only when an appliance door is closed. A latch frame (9) is mounted to an interior panel (28) of a door (3), and a latch handle (10) is pivotally mounted to the frame (9) and extends through a slot in the door. A tab (11) is coupled to the latch handle (10) and engages a stationary keeper (12) mounted on a liner (5) of the appliance. The latch handle is rotated approximately 90° to disengage the tab (11) from the keeper (12) to open the door, and the handle is rotated back 90° to engage the tab (11) to the keeper (12) to close the door. A latch handle extension (20) engages the door switch in the closed position. Scott col. 3, lines 1-53.

Claims 7 and 8 depend from Claim 6, which recites a door latch assembly for an appliance, the latch assembly comprising "a door comprising a door retainer projection," "a latch handle pivotally mounted to said door," and "a latch actuator pivotally mounted to said door, said latch handle pivoting in one direction, said latch actuator pivoting in another direction, said handle selectively positionable between an open position and a closed position to couple said door to the appliance via said door retainer projection."

Neither Rop nor Scott, alone or in combination, describe or suggest a door latch assembly including a door having a door a retainer projection for closure of the door with a latch handle and a latch actuator. Rather, Rop describes a latch mechanism bolt (14) is engaged to a keeper (11) mounted to a refrigerator cabinet. As described by Rop, the door is apparently incapable of retaining the door to the keeper.

Likewise, Scott describes a latch handle including a tab (11) that engages a stationary keeper (12) attached to an appliance liner (5). The door (3) does not include a retainer feature that would retain the door in a closed position, and absent the latch the door, apart from the latch mechanism, is apparently incapable of retaining the door to the keeper.

Therefore, Rop in view of Scott do not suggest a door latch assembly for an appliance, the latch assembly including a door having a door retainer projection, a latch handle pivotally mounted to the door and a latch actuator pivotally mounted to the door and pivoting in opposite directions, and the handle selectively positionable between an open position and a closed position to couple the door to the appliance via the door retainer projection.

Claim 6 is therefore submitted to be patentable over Rop in view of Scott. When the recitations of Claims 7 and 8 are considered in combination with the recitations of Claim 6, Applicants submit that dependent Claims 7 and 8 likewise are patentable over Rop in view of Scott.

Claim 11 recites a dishwasher comprising “a tub assembly comprising a keeper attached thereto,” “a door assembly comprising a door retainer portion for engagement with said keeper,” “a latch handle pivotally coupled to said door assembly for rotation about a first longitudinal axis,” “a latch actuator pivotally coupled to said door assembly for rotation about a second longitudinal axis, said latch handle and said latch actuator rotationally coupled to one another, said latch actuator disengaging said keeper from said door retainer projection as said handle is rotated.”

Rop in view of Scott do not suggest the dishwasher recited in Claim 11.

As noted above, neither Rop nor Scott, alone or in combination, describe or suggest a door latch assembly including a door having a door a retainer projection for closure of the door with a latch handle and a latch actuator. Rather, Rop describes a latch mechanism bolt (14) engaged to a keeper (11) mounted to a refrigerator cabinet. As described by Rop, the door itself is apparently incapable of retaining the door to the keeper. Scott describes a latch handle including a tab (11) that engages a stationary keeper (12) attached to an appliance liner (5). The door (3) includes no retainer feature that would retain the door in a closed position, and absent the latch the door is apparently incapable of retaining the door to the keeper.

Rop in view of Scott are therefore not suggestive of a dishwasher having a door assembly comprising a door retainer portion for engagement with a keeper.

Claim 11 is therefore submitted to be patentable over Rop in view of Scott.

Claims 12-15 depend, directly or indirectly, from independent Claim 11. When the recitations of Claims 12-15 are considered in combination with the recitations of Claim 11, Applicants submit that dependent Claims 12-15 likewise are patentable over Rop in view of Scott.

Claim 19 recites a dishwasher comprising “a tub assembly comprising a keeper attached thereto,” “a door assembly comprising a bracket and a door retainer projection for engaging said

keeper," "a latch handle hingedly coupled to said bracket, said latch handle selectively positionable about a first longitudinal axis," and "a latch actuator hingedly coupled to said bracket and rotatable about a second longitudinal axis, said latch actuator in contact with said latch handle, a position of said latch actuator determined by a position of said latch handle, said latch handle positionable to disengage said keeper from said door retainer projection with said latch actuator."

Neither Rop nor Scott, alone or in combination, describe or suggest a door latch assembly including a door having a door a retainer projection for engaging a keeper. Rather, Rop describes a latch mechanism bolt (14) engaged to a keeper (11) mounted to a refrigerator cabinet. As described by Rop, the door is apparently incapable of retaining the door to the keeper. Scott describes a latch handle including a tab (11) that engages a stationary keeper (12) attached to an appliance liner (5). The door (3) includes no retainer feature that would retain the door in a closed position, and absent the latch the door is apparently incapable of retaining the door to the keeper.

Rop in view of Scott are therefore not suggestive of a dishwasher having a door assembly comprising a door retainer portion for engagement with a keeper.

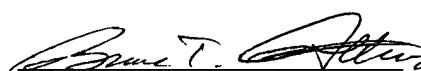
Claim 19 is therefore submitted to be patentable over Rop in view of Scott.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 7, 8, 11-15 and 19 be withdrawn.

9D-DW-19324-CIP
PATENT

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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9D-DW-19324-CIP
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Miller et al. :
 Serial No.: 09/682,877 : Art Unit: 3677
 Filed: October 26, 2001 : Examiner: Lugo, Carlos
 For: METHODS AND APPARATUS :
 FOR SECURING A
 DISHWASHER DOOR

SUBMISSION OF MARKED UP PARAGRAPHS AND CLAIMS

Hon. Assistant Commissioner for Patents
Washington, D.C. 20231

In furtherance of the response to the Office Action dated June 18, 2002 submitted herewith, Applicants hereby submit marked up versions of the amendments therein:

IN THE ABSTRACT

Please replace the abstract with the following paragraph:

A latch assembly for a door including a door retainer projection is provided. The latch assembly includes a handle pivotally mounted to the door for rotation about a first end, and a latch actuator contacting said handle and mounted to the door for rotation about a first end. The handle rotates in one direction when actuated and [said] the latch actuator rotates in a second direction opposite the first direction. A keeper is engaged to the door retainer projection in a closed position, and the latch actuator is configured to disengage [said] the keeper from the door retainer projection when [said] the handle is actuated.

IN THE SPECIFICATION

Please replace paragraph 18 with the following paragraph:

[0018] Figure 1 is a perspective view of an under-the-counter type dishwasher 10 installed beneath a counter 12. Dishwasher 10 includes a door 14 and a base 16. Door 14 includes an upper edge 18 and a lower edge 20 which is hingedly coupled to base 16. A control panel 22 including a plurality of controls 24 is secured to an upper portion of door 14. In an exemplary embodiment, control panel 24 is secured to an escutcheon 23 which, in turn, is mounted to an upper portion of door 14. In an alternative embodiment control panel [124] 24 is integrated directly into door 14. Dishwasher 10 also includes a latch assembly 26 for opening and closing door 14 relative to base 16. In the exemplary embodiment, latch assembly 26 includes a handle 28.

Please replace paragraph 32 with the following paragraph:

[0032] Figure 5 is a cross sectional schematic view of an illustrative embodiment of a portion of a dishwasher door assembly 180 through a plane wherein the above-described latch assembly 180 is located but with the latch assembly removed. Door assembly 180 may, for example, be incorporated into door 14 (shown in Figure 1) and used with one of the foregoing latch assemblies, such as, for example, latch assembly 110 (shown in Figure 4). Door assembly 180 includes an outer door panel 182, an inner door panel 184, and an escutcheon 186 attached to outer door panel 182 and inner door panel 184. Each of inner door panel and outer door panel 184, [186] 182, in an exemplary embodiment, are formed into shallow box-like structures attached to one another at a seam [186] 187 with known fasteners and fastening techniques. In one embodiment, each panel 182, 184 includes four lateral sides extending from one another in a rectangular configuration, and attachment flanges extend substantially perpendicularly to respective lateral sides of the panels for attachment to one another at seam [136] 187. As such, a sturdy but hollow door frame is provided by door panels 182, 184.

Please replace paragraph 33 with the following paragraph:

[0033] Escutcheon 186 is mounted to door panels 182, 184 and includes a rounded hood portion 188 and an inclined control panel mounting surface 190 extending beneath hood

portion 188 to protect surface 190 from countertop spills and drips. In the illustrated embodiment, control mounting surface 190 extends from an upper portion of door outer panel 182 and is inwardly inclined to form a recessed control panel mounting surface, and hood portion 188 overhangs door outer panel 182.

IN THE CLAIMS

1. (once amended) A latch assembly for a door including a door retainer projection, said latch assembly comprising:

a handle pivotally mounted to the door for rotation about a first end;

a latch actuator contacting said handle and mounted to the door for rotation about a [first] second end, said handle rotating in one direction when actuated and said latch actuator rotating in a second direction opposite the first direction; and

a resilient keeper engaged to the door retainer projection in a closed position, said latch actuator configured to disengage said keeper from the door retainer projection when said handle is actuated.

2. (once amended) A latch assembly in accordance with Claim 1, said [latch] handle comprising an actuator portion in sliding engagement with said latch actuator.

3. (once amended) A latch assembly in accordance with Claim 1, said [latch] handle further comprising a closed handle stop.

4. (once amended) A latch assembly in accordance with Claim 1, said [latch] handle comprising a pin and a longitudinal axis, said latch actuator comprising a pin and a longitudinal axis, said latch handle longitudinal axis displaced from said latch actuator longitudinal axis.

5. (once amended) A latch assembly in accordance with Claim 1 further comprising a bracket, said [latch] handle and said latch actuator mounted to said bracket.

6. (once amended) A door latch assembly for an appliance comprising:

a door comprising a door retainer projection;

a latch handle pivotally mounted to said door; and

a latch actuator pivotally mounted to said door, said latch handle pivoting in one direction, said latch actuator pivoting in another direction, said handle selectively positionable between an open position and a closed position to couple said door to the appliance via said door retainer projection.

7. (once amended) A door latch assembly in accordance with Claim 6 wherein the appliance is a dishwasher including a tub assembly, [said door comprising a door retainer projection,] said latch assembly further comprising a keeper attached to the door assembly for engaging said door retainer projection.

16. (once amended) A door assembly for a dishwasher, said door assembly comprising:

an escutcheon;

a latch handle pivotally mounted to said escutcheon about a first rotational axis; and

a latch actuator pivotally mounted to said escutcheon about a second rotational axis; said latch handle contacting said latch actuator when rotated about said first longitudinal axis in a first direction and causing said latch [handle] actuator to rotate about said second longitudinal axis in a second direction opposite said first direction.

19. (once amended) A dishwasher comprising:

a tub assembly comprising a keeper attached thereto;

a door assembly comprising a bracket and a door retainer projection for engaging said keeper;

a latch handle hingedly coupled to said bracket, said latch handle selectively positionable about a first longitudinal axis; and

a latch actuator hingedly coupled to said bracket and rotatable about a second longitudinal axis, said latch actuator in contact with said latch handle, a position of said latch actuator determined by a position of said latch handle, said latch handle positionable to disengage said keeper from said door retainer projection with said latch actuator.

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